

Western Great Basin Coordination Center

1999 Season Overview

Weather and Fuels

Under the influence of La Nina, the fall and winter of 1998-99 saw mild temperatures throughout the Western Great Basin Area. While northwestern Nevada and the Sierra reported slightly above normal precipitation amounts in January and February, eastern and southern Nevada received very little precipitation, especially at the lower elevations. However, just enough precipitation had occurred in eastern and southern Nevada to trigger germination of the cheatgrass, which then out-competed the native grasses, shrubs and trees. In mid-April, fuel moistures in southern Nevada were 50% below the readings from the same period in 1998. By the end of May, southern Nevada was experiencing heavy initial attack activity due to cured fine fuels and below normal live fuel moistures in the sagebrush and pinion/juniper.

Green-up stalled until May in the northern half of the state as a result of below normal temperatures, while a heavy frost and snow at the end of May helped to add more fine, flashy, dead fuel biomass to the landscape as the new growth was killed. Warm temperatures in June combined with dry, windy surface conditions to promote early curing in the heavy (800 to 2,500 lbs/acre), continuous loadings of fine fuels that were present in north-central and northwestern Nevada. By July, all of the fine fuels had cured up to the 7,000 ft. level statewide. Extensive severity prepositioning of initial attack resources was done in anticipation of a heavy fire workload. Without these additional resources, the devastation of the 1999 season would doubtless have been even worse.

NFDRS Burning Indices (BI) and Spread Components (SC) reached all-time highs in 1999; the spread component numbers equated to a rate of spread in an advancing flame front of 2-3 miles per hour. Live and 1,000-hr. fuel moisture conditions continued to worsen in August under a pattern of single digit daytime relative humidities, poor nighttime humidity recovery (15-22%), and strong winds. Dry lightning provided the ignition source. Advanced fire behavior became the norm and fires burned actively through the night. In mid-September, fire activity finally began to decrease as a result of shorter days and cooler nighttime temperatures.

35 Fire Weather Watch/Red Flag events resulted in a total of 157 Red Flag Warnings and 95 Fire Weather Watches being issued (all zones) between May and October. The National Weather Service also prepared 131 Spot Forecasts for wildfires.

Large Fire Activity

Large fire activity set the 1999 season apart, surpassing the 1994-1998 average of 44 large fires per year and eclipsing 1996's total of 102 large fires. After several early season large fires in southeastern Nevada, monsoonal moisture helped to mitigate large fire activity in that portion of the state. From late June through mid-September, large fire activity throughout northern Nevada was nearly continuous, but the brunt of fire activity was felt in August. During the first week of August, dry lightning

touched off 154 new fires. These fires resulted in roughly 1 million acres burned and the commitment of 75% of the United States' firefighting resources.

The last large fire of the season was controlled on November 28th. By that date, 113 large fires had burned a total of 1,642,484 acres (all agencies plus private). From 1994-1998, large fires represented an average of 4.6% of the total number of fires. By comparison, 9.7% of all fires in 1999 were at least 300 acres, with the largest single fire (Sadler) reported at 199,194 acres. 11 of the large fires were between 10,000 and 20,000 acres in size, while 21 of the fires were 20,000+ acres. As is generally the case, large fires make up the majority of the total acreage burned; in 1999, large fires accounted for 87% of the total acres burned.

Incident Management Teams

1999 was a record year for team mobilizations within the Western Great Basin Area, with 10 times as many teams being mobilized as in 1998, and twice as many as in 1996 (the previous record year). In all, 29 Type 2 Incident Management Team assignments occurred, while 2 Type 1 Teams and 1 Area Command Team also saw assignments within the Area. Vorce's Type 2 Incident Management Team (IMT) had both the first (Blue Garden) and last (Signboard) team assignments of the 1999 season.

Western Great Basin incidents with Incident Management Teams assigned can be broken down as follows:

<u>Agency</u>	<u># of Large Fires*</u>	<u># of Team Assignments</u>
Bureau of Land Management (BLM)	99	29
U.S. Forest Service (USFS)	7	1
Nevada Division of Forestry (NDF)	3	2
Duck Valley Tribe (DVT)	1	0

* In addition to large fire incidents, 1 Type 2 IMT was assigned to manage a staging/mobilization center for northeastern Nevada.

Historical Comparison

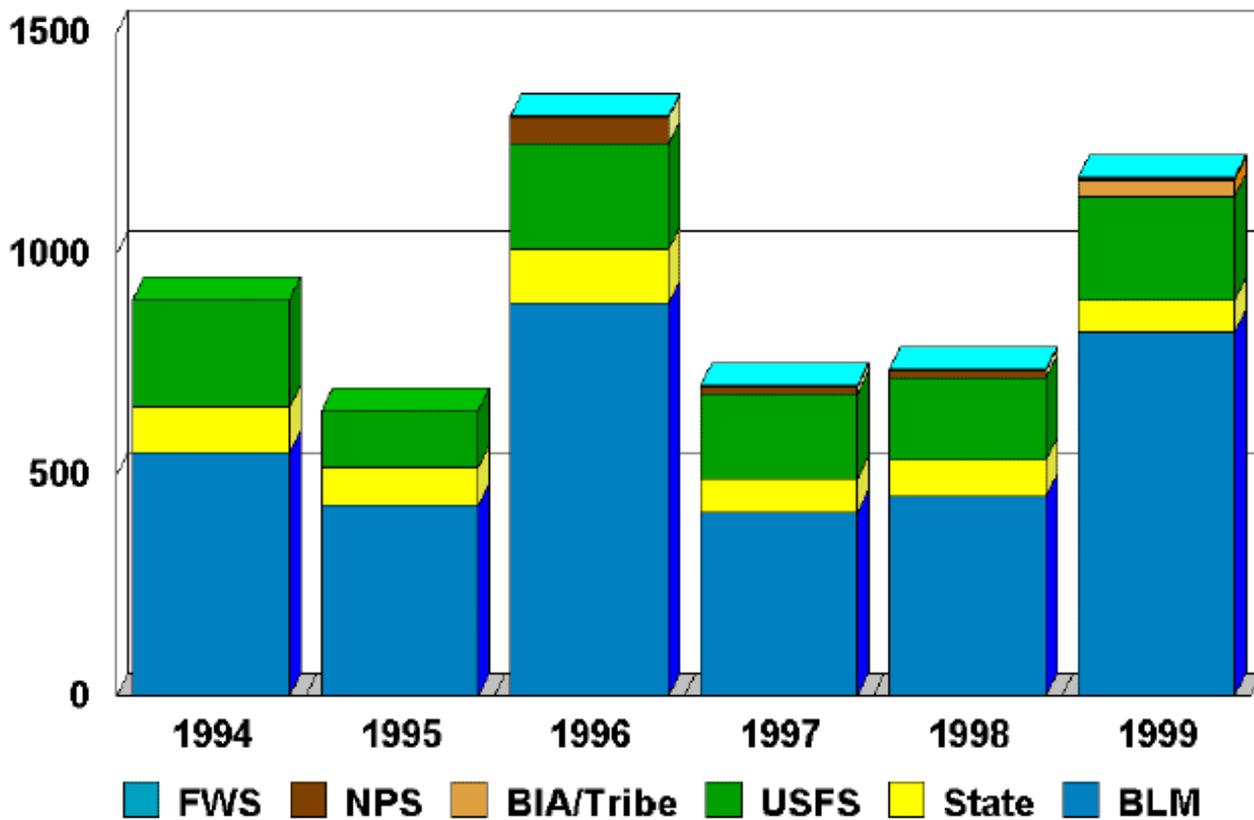
The 1999 season set new all-time records for the severity and breadth of fire damage. At 1,152, the total number of fires was 135% of the 5-year average, but the total of 1,870,285 acres burned was 773% of the 5-year average of 242,056 acres. More acres were burned during one 7-10 day period in August than had burned in any of the (entire) previous seasons on record.

Fire Rehabilitation Efforts

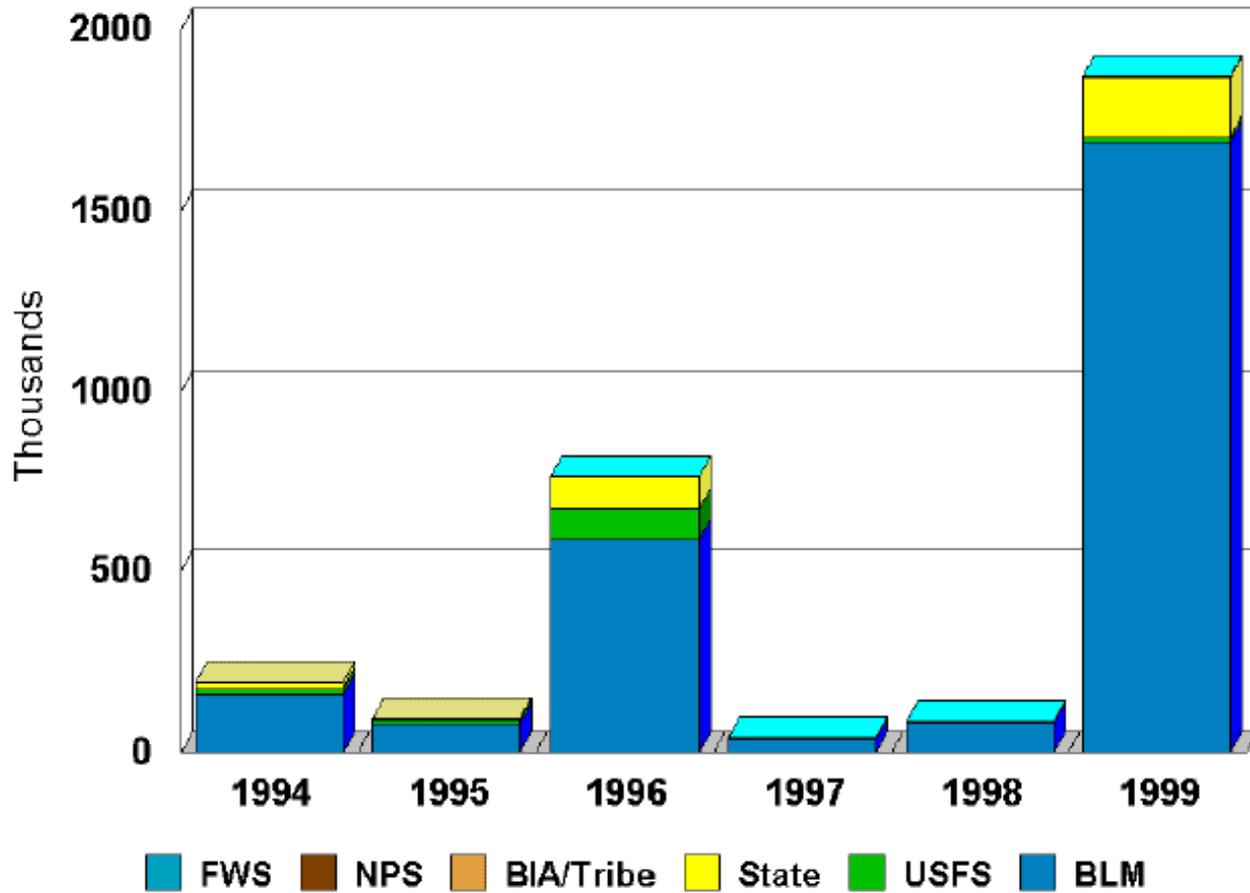
The extent of resource damage resulting from the 1999 season raised concerns that cheatgrass and other exotic species would continue to spread, native grasses and plants would decrease, erosion and riparian area damage would result, and a wildland fire cycle that will perpetuate the degraded condition of the Great Basin rangelands would ensue.

Even while much of northern Nevada's large fire activity continued, Burned Area Emergency Rehabilitation (BAER) Teams were mobilized to assess the fire damage and provide recommendations for mitigation and restoration in accordance with existing land management plans. Team findings also included identification of areas to be green-stripped with perennial grasses in order to reduce the potential for large, devastating fires. A contract was issued for 5.4 million pounds of seed, covering 497,924 acres.

**Western Great Basin
Total Number of Wildfires
1994-1999**



Western Great Basin Total Number of Acres Burned 1994-1999



BLM acreages include other agency/private acres burned.

**Western Great Basin Area
1999 Fire Statistical Summary**

Unit/Agency	Fires by Cause		Acres by Cause		Total Fires	Total Acres
	Human	Lightning	Human	Lightning		
Eastern Nevada Agency	1	2	20	60	3	80
Western Nevada Agency	27	5	872	3	32	875
Bureau of Indian Affairs	28	7	892	63	35	955
Duck Valley Tribe	1	0	716	0	1	716
Tribes	1	0	716	0	1	716
Elko Field Office	44	122	112,795	438,587	166	551,382
Winnemucca Field Office	82	68	40,745	599,170	150	639,915
Carson City Field Office	66	53	43,817	126,393	119	170,210
Ely Field Office	36	234	3,793	47,541	270	51,334
Las Vegas Field Office	25	19	20	28	44	48
Battle Mountain Field Office	20	64	954	279,036	84	279,990
Bureau of Land Management	273	560	202,124	1,490,755	833	1,692,879
Ruby Lake NWR	1	0	0	0	1	0
Fallon NWR	0	1	0	0	1	0
Pahranagat/Desert NWRs	1	0	116	0	1	116
U.S. Fish and Wildlife Service	2	1	116	0	3	116
Great Basin National Park	0	1	0	1	1	1
Lake Mead NRA	5	0	3	0	5	3
National Park Service	5	1	3	1	6	4
Northern Region	34	15	40,553	102,684	49	143,237
Western Region	19	4	18,484	1	23	18,485
Southern Region	1	0	0	0	1	0
Nevada Division of Forestry	54	19	59,037	102,685	73	161,722
Humboldt National Forest	3	20	2,463	11,844	23	14,307
Toiyabe National Forest	112	102	1,142	115	214	1,257
U.S. Forest Service	115	122	3,605	11,959	237	15,564
Geographic Area Totals	478	710	266,493	1,605,463	1,188	1,871,956

Note: BLM totals include other agency/private acres burned.

1998 Prescribed Fire Activity

Agency/Unit	Prescribed		Wildland Fire Use	
	Fires	Acres	Fires	Acres
Elko Field Office	0	0	0	0
Winnemucca Field Office	0	0	0	0
Carson City Field Office	1	31	0	0
Ely Field Office	6	4,629	0	0
Las Vegas Field Office	3	3	0	0
Battle Mountain Field Office	0	0	0	0
Bureau of Land Management	10	4,663	0	0
Ruby Lake NWR	3	1,825	0	0
Pahrnagat/Desert NWRs	0	0	0	0
U.S. Fish and Wildlife Service	3	1,825	0	0
Great Basin NP	0	0	0	0
Lake Mead NRA	13	3,700	0	0
National Park Service	13	3,700	0	0
Northern Region	1	1,000	0	0
Western Region	0	0	0	0
Southern Region	0	0	0	0
Nevada Division of Forestry	1	1,000	0	0
Humboldt National Forest	0	0	0	0
Toiyabe National Forest	2	81	0	0
U.S. Forest Service	2	81	0	0
Geographic Area Totals	29	11,269	0	0

Western Great Basin Coordination Center

Large Fires for 1999

An all-time record 113 large fires (300+ acres) burned 1,642,484 acres statewide (all agencies and private) in 1999. Another 1,039 smaller fires brought the total to 1,870,285 acres burned. Large fire activity was broken down by Dispatch Center as follows:

Dispatch Center	Map Ref #	Incident Name	Size at Control	Date of Control	Team Assigned
EIDC	14	Hunter	4,640 ac.	7/05/99	
	20	Soap	1,836 ac.	7/12/99	
	19	Clover	73,077 ac.	7/12/99	Burdick (T2)
	23	Argenta	470 ac.	7/12/99	
	24	Pilot	3,200 ac.	7/19/99	
	28	Rain	21,730 ac.	7/21/99	Burdick (T2)
	29	Railroad Pass	1,100 ac.	7/22/99	
	30	Wagon Box	32,127 ac.	7/25/99	Carr (T2)
	37	Izzenhood	28,594 ac.	8/08/99	
	38	Baxter	1,621 ac.	8/09/99	
	39	Table Mtn.	3,500 ac.	8/05/99	
	40	Bispo	749 ac.	8/07/99	
	44	Sadler Complex*:			Hefner (2)/Storey (1)
		Piney	11,000 ac.	8/11/99	
		Horse Creek	14,315 ac.	8/06/99	
		Sadler	199,194 ac.	8/12/99	
	42	Frenchie	53,679 ac.	8/06/99	
	43	Rose	48,480 ac.	8/10/99	
	47	Dry Canyon	399 ac.	8/10/99	

	48	East Canyon	1,200 ac.	8/13/99	
	57	Dido Complex:		8/26/99	Burdick (T2)
		Cedar Ridge 1	250 ac.		
		Cedar 2	300 ac.		
		West South Fork	400 ac.		
		Cedar Ridge 3	640 ac.		
		Cedar Ridge 4	180 ac.		
	56	Welches Creek	13,184 ac.	8/22/99	
	61	Holborn	1,000 ac.	8/23/99	
	55	Mitchell Creek	3,071 ac.	8/26/99	
	59	Horse Creek 2**	2,400 ac.	8/23/99	
	91	Lee	350 ac.	8/23/99	
	75	Hwy 93	1,200 ac.	8/23/99	
	66	Davis	500 ac.	8/24/99	
	65	I-Ranch	1,000 ac.	8/25/99	
	74	Boulder	700 ac.	8/27/99	
		No. Nevada Staging			Saleen (T2)
	79	China Gulch	776 ac.	9/08/99	
	81	Bruneau	1,092 ac.	9/12/99	
	85	Rye Patch	300 ac.	9/21/99	
	86	No School 2	11,271 ac.	10/16/99	Carr (T2)
	87	Hanks Creek	1,100 ac.	10/27/99	
	88	Signboard	4,433 ac.	11/10/99	Vorce (T2)
	89	Trout Creek 2**	3,200 ac.	11/08/99	
CNIDC	1	Oreana	392 ac.	5/28/99	
	4	Mill	1,883 ac.	6/13/99	
	5	Fairview	1,373 ac.	6/16/99	
	8	Kings River	976 ac.	6/29/99	
	9	House 80	1,992 ac.	6/30/99	
	12	Treaty	649 ac.	7/03/99	
	16	Washburn	341 ac.	7/04/99	
	17	Buffalo	500 ac.	7/05/99	
	18	Tungsten	1,789 ac.	7/10/99	

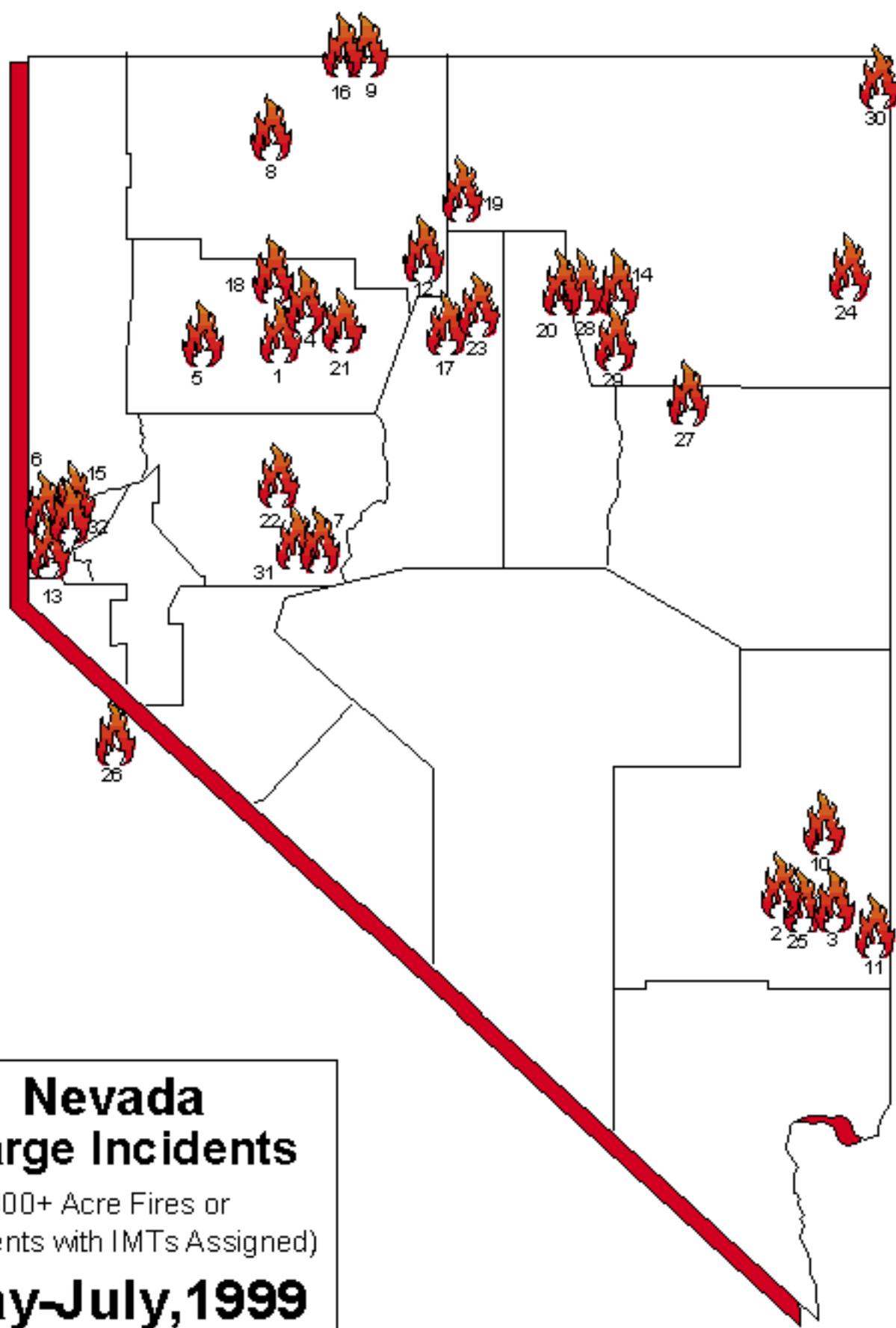
	21	Lang Syne	24,340 ac.	7/16/99	Johnson (T2)
	33	Martin	485 ac.	8/02/99	
	36	Jungo Complex:			Suwyn (T2)
		Denio North	1,285 ac.	8/06/99	
		Sombrero	80,448 ac.	8/20/99	
		Denio	72,179 ac.	8/10/99	
		Blue Mt.	15,308 ac.	8/10/99	
	35	Corridor Complex::			Richer (T1)
		Chimney	33,581 ac.	8/09/99	
		Lone Butte	31,625 ac.	8/07/99	
		Winnemucca Area Command			Meuchel
	34	Dun Glen Complex:			Vorce (T2)
		Unionville	22,063 ac.	8/13/99	
		Cosgrave	28,918 ac.	8/04/99	
		Rochester	13,324 ac.	8/11/99	
		Poker Brown	191,389 ac.	8/20/99	
		Siard	2,233 ac.	8/10/99	
		Eugene	7,224 ac.	8/14/99	
		Cyanco	10,619 ac.	8/08/99	
		Grass Valley 1	12,450 ac.	8/10/99	
	45	Battle Mtn. Complex:			Burdick (T2)
		Antelope 2	139,775 ac.	8/11/99	
		Cedars	3,737 ac.	8/09/99	
		Cedar 2	9,283 ac.	8/09/99	
		Mule Canyon	16,813 ac.	8/09/99	
	46	Eureka Complex:			Summerfelt (T2)
		Trail Canyon	95,793 ac.	8/14/99	
	52	Tunnel Camp	1,860 ac.	8/08/99	
	49	Andorno	2,279 ac.	8/16/99	
	55	MM 56	317 ac.	8/18/99	
	51	290 Junction	1,345 ac.	8/18/99	
	69	Dutch Flat	1,122 ac.	8/20/99	
	50	East Quinn	999 ac.	8/19/99	
	62	Button Point	714 ac.	8/20/99	

	63	Virgin	1,449 ac.	8/19/99	
	64	Tungston House	6,028 ac.	8/24/99	
	70	Lower Granite	537 ac.	8/24/99	
	54	Filipini	1,077 ac.	8/19/99	
	58	Moses Complex*:			Hefner (T2)
		Blitz	5,142 ac.	8/22/99	
	71	Trout Creek	609 ac.	8/24/99	
	72	Pass Creek	8,833 ac.	8/27/99	Saleen (T2)
	73	Rail Springs	771 ac.	8/27/99	
	83	Dead Horse	1,628 ac.	9/12/99	
	90	Paiute	1,648 ac.	11/28/99	
SFIDC	6	Reservoir	5,742 ac.	6/26/99	Carlson (T2)
	7	Cold Springs	540 ac.	6/29/99	
	13	Mira Loma	2,297 ac.	7/04/99	Linardos (T2)
	15	Pah Rah	10,600 ac.	7/07/99	
	22	Stillwater	4,552 ac.	7/21/99	
	26	West	247 ac.	7/19/99	Carlson (T2)
	31	Sand Springs	15,360 ac.	7/25/99	Vorce (T2)
	32	Lockwood	15,584 ac.	7/26/99	Linardos (T2)
	41	New Pass Complex*:			Williams (T2)
		New Pass	47,626 ac.	8/11/99	
		Poco	5,985 ac.	8/11/99	
		Shirttail	5,237 ac.	8/11/99	
		Shoshone	8,000 ac.	8/11/99	
	92	Wilcox	7,000 ac.	8/07/99	Linardos (T2)
	60	Powell	650 ac.	8/23/99	
	67	Fish Complex	47,633 ac.	8/29/99	Vorce (T2)
	68	Red Rock	7,015 ac.	8/29/99	Linardos (T2)
	76	Sutro	1,000 ac.	8/29/99	Linardos (T2)
	80	Cemetary	1,282 ac.	9/09/99	Giampaoli (T2)
EICC	2	Rainbow Ranch	2,392 ac.	6/02/99	
	3	Blue Garden	10,000 ac.	6/04/99	Vorce (T2)

	10	Pioche	600 ac.	7/01/99	
	11	Condor 2	2,040 ac.	7/02/99	Vorce (T2)
	25	Delamar	22,591 ac.	7/21/99	
	78	Pan Am	434 ac.	8/10/99	
	27	Maverick	1,500 ac.	7/21/99	
	77	Sellem	8,312 ac.	9/02/99	Suwyn (T2)
	82	Schoolmarm	382 ac.	9/13/99	
	84	Pahroc Complex	500 ac.	9/20/99	

** In addition to the individual large fires listed, acreage totals include other small fires within the complex.*

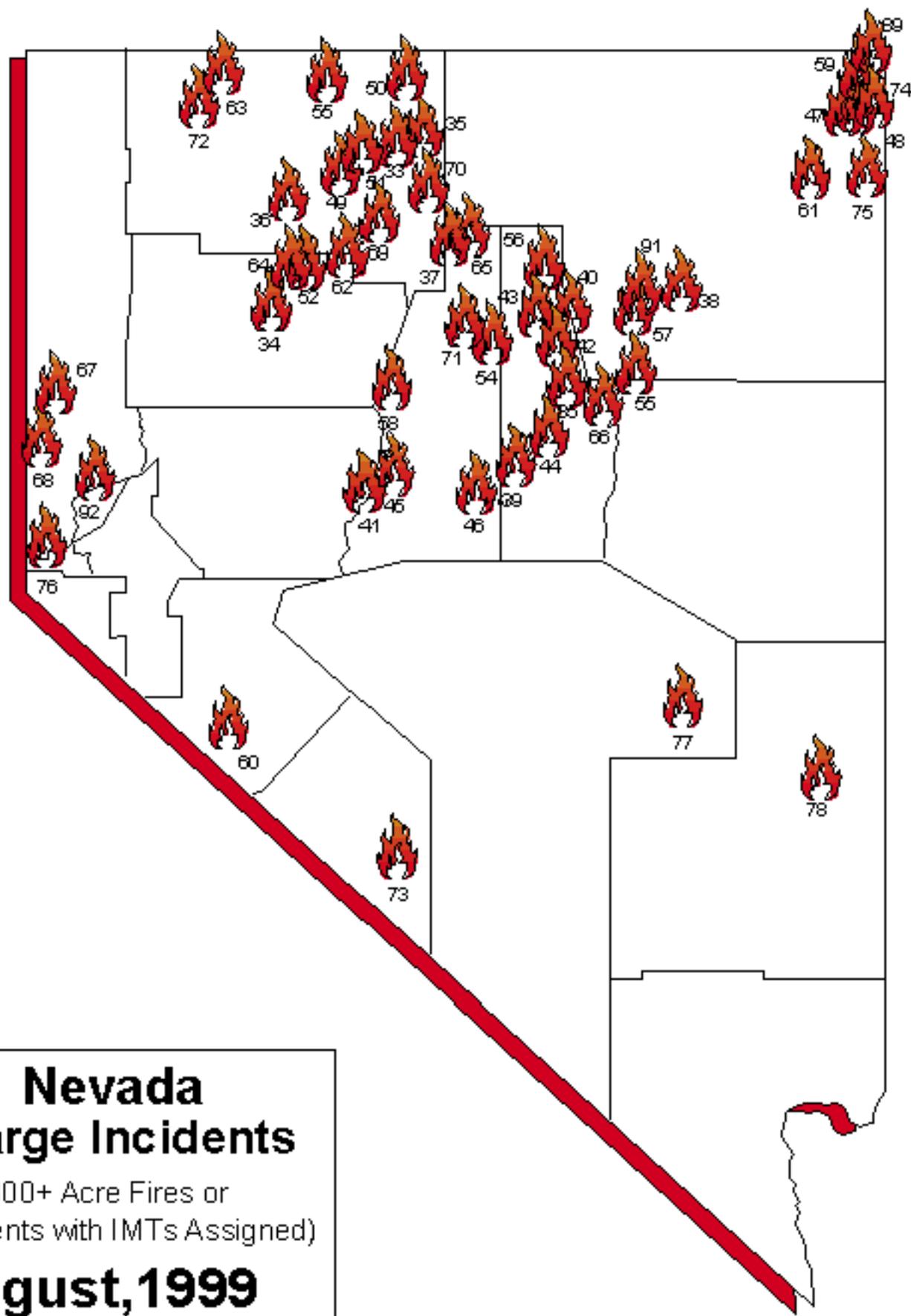
*** Initial and extended attack was handled by Upper Snake River District, ID.*



Nevada Large Incidents

(300+ Acre Fires or
Incidents with IMTs Assigned)

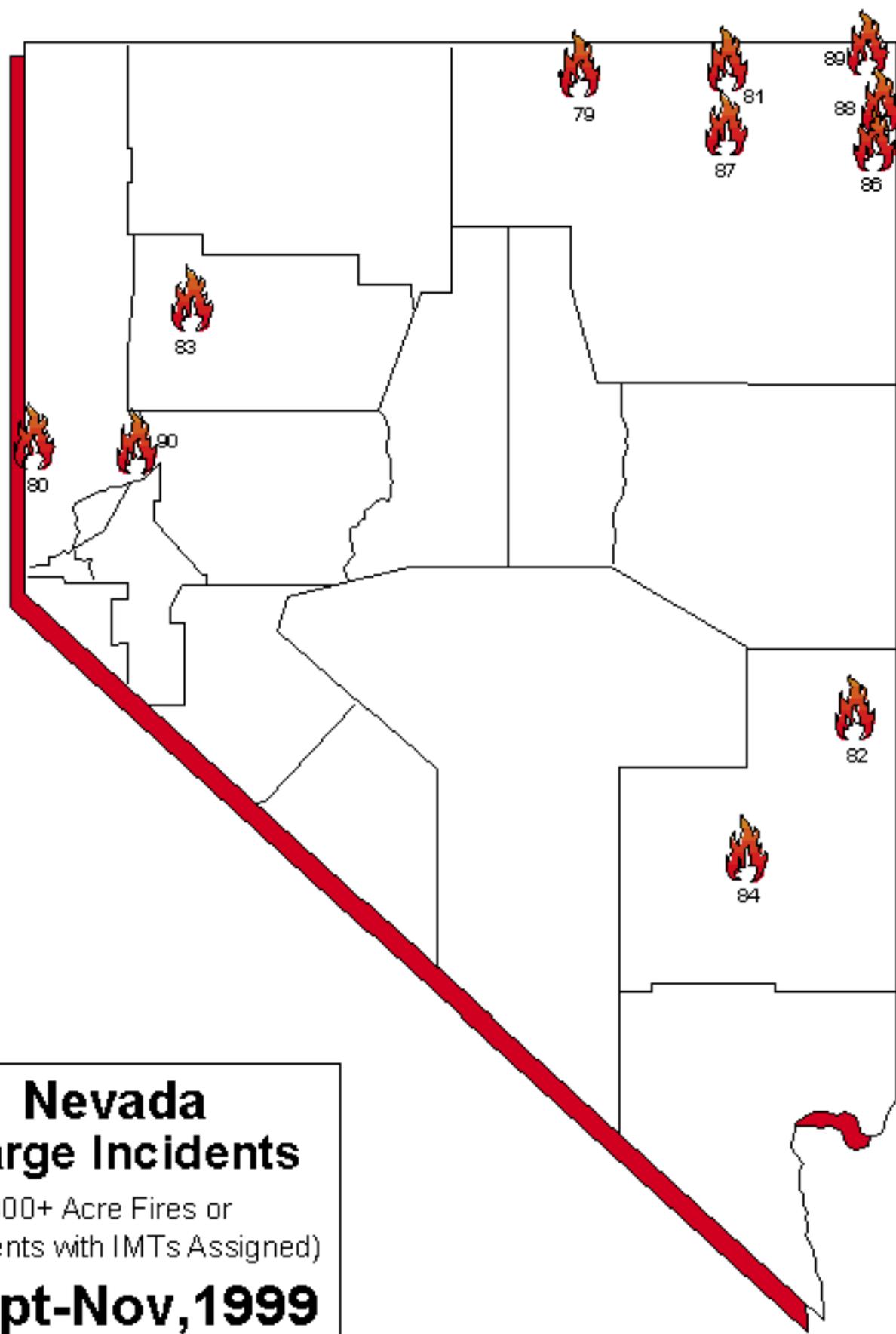
May-July, 1999



Nevada Large Incidents

(300+ Acre Fires or
Incidents with IMTs Assigned)

August, 1999



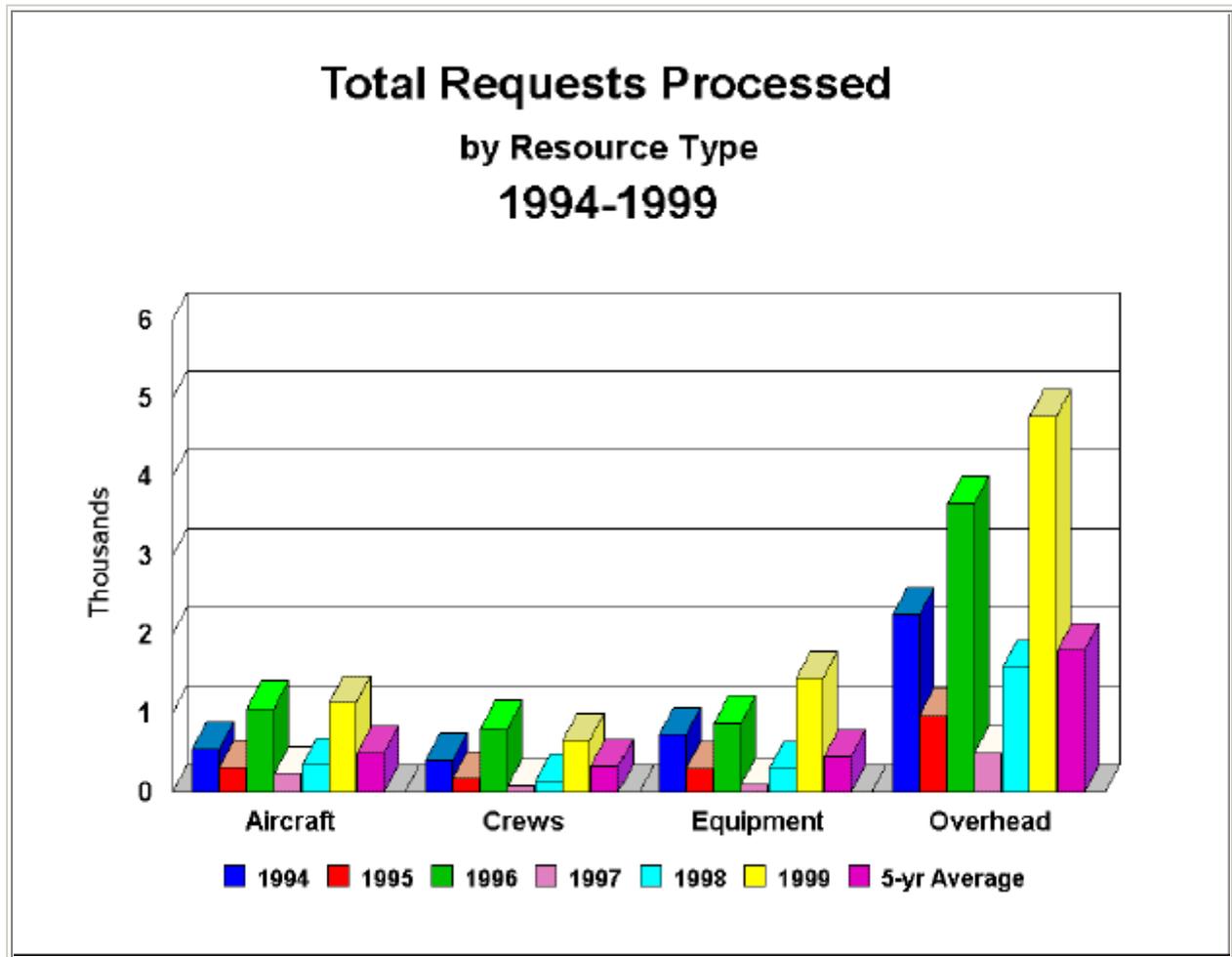
Nevada Large Incidents

(300+ Acre Fires or
Incidents with IMTs Assigned)

Sept-Nov, 1999

Western Great Basin Coordination Center

1999 Workload Measures

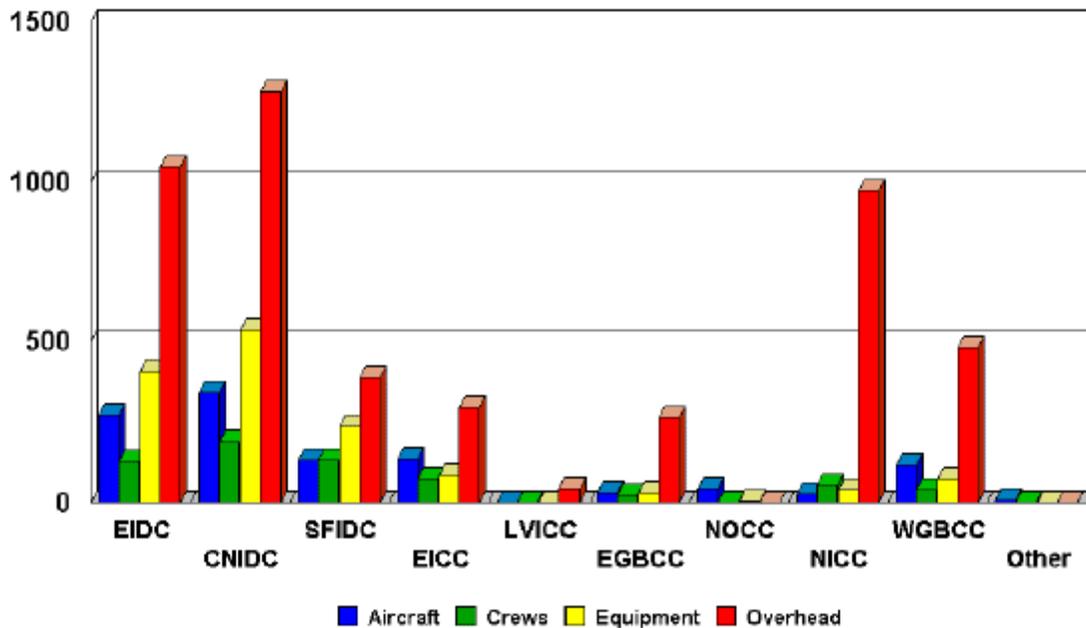


Total Resource Requests Processed by Year 1994-1999

Year	Aircraft	Crews	Equipment	Overhead	Total
1994	547	420	736	2,256	3,959
1995	319	176	297	972	1,764
1996	1,060	823	877	3,670	6,430
1997	240	84	109	501	934
1998	353	141	304	1,576	2,374
1999	1,133	660	1,434	4,783	8,010
5-yr. Average	504	329	465	1,795	3,092

Total Resource Requests

by Ordering Office and Resource Type
1999



Total Resource Requests Processed (by Resource Type and Office Placing the Order) 1999

Dispatch Center	Aircraft	Crews	Equipment	Overhead	Total
EIDC	271	132	409	1,046	1,858
CNIDC	343	191	537	1,281	2,352
SFIDC	137	135	238	389	899
EICC	138	76	87	297	598

LVICC	1	3	2	44	50
EGBCC	35	24	35	266	360
WGBCC	121	41	76	484	722
NOCC	46	0	6	1	53
NICC	31	58	42	973	1,104
Other*	10	0	2	2	14
Totals	1,133	660	1,434	4,783	8,010

* "Other" includes the BLM Boise Smokejumpers and Southern Idaho Interagency Logistics Center.

Note: All statistics are for orders processed through the Western Great Basin Coordination Center only.
They do not include dispatches on home units or to neighboring units under initial attack agreements
(if less than 24 hours in duration). Supply orders are not included.
